

DOCKET NO. D-2007-039 CP-2

DELAWARE RIVER BASIN COMMISSION

Discharge to a Tributary of Special Protection Waters

**Borough of East Stroudsburg
Water Filtration Plant
Smithfield Township, Monroe County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by RKR Hess Associates on behalf of the Borough of East Stroudsburg (ESB) on March 15, 2011 (Application), for renewal of an existing water filtration plant (WFP) and its related filter backwash discharge. National Pollutant Discharge Elimination System (NPDES) Permit No. PA0034517 for this project was approved by the Pennsylvania Department of Environmental Protection (PADEP) on March 26, 2007. Renewal of the NPDES Permit is expected shortly after docket issuance.

The Application was reviewed for continuation of the project in the Comprehensive Plan and approval under Section 3.8 of the *Delaware River Basin Compact*. The Monroe County Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on March 7, 2012.

A. DESCRIPTION

- 1. Purpose.** The purpose of this docket is to renew approval of the existing 0.09 million gallons per day (mgd) filter backwash discharge from the 2.1 mgd ESB WFP.
- 2. Location.** The ESB WFP will continue to discharge to Sambo Creek at River Mile 213.5 – 5.2 – 3.5 (Delaware River – Brodhead Creek – Sambo Creek), in the drainage area to the Middle Delaware Special Protection Waters (SPW) area. The WFP is located in Smithfield Township, Monroe County, Pennsylvania as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	41° 02' 41"	75° 10' 55"

3. **Area Served.** The ESB WFP supplies drinking water to the Borough of East Stroudsburg, Monroe County, Pennsylvania. The WFP processes up to 2.1 mgd of water, with a resulting filter backwash discharge of up to 0.09 mgd. Water treated by the WFP is withdrawn from a combination of two reservoirs on Sambo Creek. Each of these water sources is described in Docket No. D-92-72 CP, which was approved by the Commission on December 8, 1999.

For the purpose of defining the Area Served, the Application is incorporated herein by reference consistent with conditions contained in the DECISION section of this docket.

4. **Physical Features.**

a. **Design Criteria.** The existing 0.09 mgd WFP will continue to discharge to Sambo Creek intermittently. The WFP typically recycles the filtered water back to the head of the WFP, resulting in an inconsistent discharge to Sambo Creek (roughly 10% of the year).

b. **Facilities.** The existing WFP consists of two (2) settling basins, three (3) mixed media filters, and two (2) parallel decanting basins. All water is treated with chlorine (for disinfection), caustic soda (for pH adjustment), polyaluminum hydroxychlorosulfate (for coagulation), zinc polyphosphate (for corrosion control), and powder activated carbon (seasonally, for taste and odor control). Potable water is first routed to a 1.5 million gallon tank after the disinfection process before distribution to customers. Treated backwash is discharged to Sambo Creek intermittently from the decanting tanks roughly ten percent (10%) of the year.

The docket holder's water filtration plant discharges backwash to waters classified as SPW and is required to have available emergency power. The ESB WFP has a generator available for emergency power supply.

The docket holder's water filtration plant is not staffed 24 hours per day, and has a remote alarm system that continuously monitors plant operations.

The docket holder's existing water filtration plant has prepared and implemented an emergency management plan suitable to Commission standards.

The project facilities aren't located in the 100-year floodplain.

Wasted sludge will continue to be hauled off-site by a licensed hauler for disposal at a (State-approved) facility.

c. **Water withdrawals.** The potable water supply in the project service area is provided by the Borough of East Stroudsburg Water Department as described in Docket No. D-92-72 CP, which was approved by the Commission on December 8, 1999. DECISION Condition III.p. of Docket No. D-92-72 CP required a renewal of the docket within ten (10) years of issuance. A renewal application was received by the Commission on April 3, 2009. Commission staff expect to issue this renewal shortly.

d. **NPDES Permit / DRBC Docket.** NPDES Permit No. PA0034517 was approved by the PADEP on March 26, 2007 and includes final effluent limitations for the project discharge of 0.09 mgd to surface waters classified by the PADEP as Cold Water/Migratory Fishery (CWF/MF). Renewal of the NPDES Permit is expected shortly after docket issuance. The following average monthly effluent limits are among those listed in the NPDES Permit and meet or are more stringent than the effluent requirements of the DRBC.

EFFLUENT TABLE A-1: DRBC Parameters Included in NPDES Permit

OUTFALL 001 (WFP)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9 at all times	As required by NPDES Permit
Total Suspended Solids	30 mg/l	As required by NPDES Permit

* DRBC Requirement

EFFLUENT TABLE A-2: DRBC Parameters Not Included in NPDES Permit

OUTFALL 001 (WFP)		
PARAMETER	LIMIT	MONITORING
Total Dissolved Solids*	1,000 mg/l **	Quarterly *
CBOD (5-Day at 20° C) *	30 mg/l *	Quarterly *
Ammonia Nitrogen *	20 mg/l *	Quarterly *
Phosphorus *	Monitor & Report Only *	Quarterly *
Nitrate as Nitrogen *	Monitor & Report Only *	Quarterly *

* DRBC Requirement

** See DECISION Condition II.q.

e. **Cost.** There is no construction associated with this project and therefore there are no project costs at this time.

f. **Relationship to the Comprehensive Plan.** The discharge from the existing ESB WFP was approved by the DRBC via Docket No. D-2007-39 CP-1 on May 14, 2008. Approval of this docket will continue approval in the Comprehensive Plan.

B. FINDINGS

The purpose of this docket is to renew approval of the existing 0.09 million gallons per day (mgd) filter backwash discharge from the 2.1 mgd ESB WFP.

In 1992, the DRBC adopted SPW requirements, as part of the DRBC *Water Quality Regulations (WQR)*, designed to protect existing high water quality in applicable areas of the Delaware River Basin. One hundred twenty miles of the Delaware River from Hancock, New York downstream to the Delaware Water Gap has been classified by the DRBC as SPW. This stretch includes the sections of the river federally designated as "Wild and Scenic" in 1978 -- the Upper Delaware Scenic and Recreational River and the Delaware Water Gap National Recreation Area -- as well as an eight-mile reach between Milrift and Milford, Pennsylvania

which is not federally designated. The SPW regulations apply to this 120-mile stretch of the river and its drainage area.

On July 16, 2008, the DRBC approved amendments to its *WQR* that provide increased protection for waters that the Commission classifies as SPW. The portion of the Delaware River and its tributaries within the boundary of the Lower Delaware River Management Plan Area was approved for SPW designation and clarity on definitions and terms were updated for the entire program. (Upper/Middle SPW)

Article 3.10.3A.2.e.1). and 2). of the Commission's *WQR*, states that projects subject to review under Section 3.8 of the Compact that are located in the drainage area of Special Protection Waters must submit for approval a Non-Point Source Pollution Control Plan (NPSPCP) that controls the new or increased non-point source loads generated within the portion of the applicant's service area which is also located within the drainage area of SPW. The service area of the docket holder is located within in the drainage area to the SPW. Since this project does not entail additional construction and expansion of facilities/service area (i.e., there aren't any new or increased non-point source loads associated with this approval), the NPSPCP requirement is not applicable at this time. Accordingly, DECISION Conditions II.l. and II.m. have been included in this docket.

At the project site, the Sambo Creek has an estimated seven-day low flow with a recurrence interval of ten years (Q_{7-10}) of 0.097 mgd (0.15 cfs). The ratio of this low flow to the average design wastewater discharge from the ESB WFP is approximately 1 to 1.

The nearest surface water intake of record for public water supply downstream of the ESB WFP discharge is on the Delaware River and is operated by the City of Easton approximately 37.5 miles away.

The project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact on the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

The limits in the NPDES Permit are in compliance with Commission effluent quality requirements, where applicable.

The project is designed to produce a discharge meeting the effluent requirements as set forth in the *WQR* of the DRBC.

C. DECISION

I. Effective on the approval date for Docket No. D-2007-039 CP-2 below:

a. The project described in Docket No. D-2007-39 CP-1 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-2007-039 CP-2; and

b. Docket No. D-2007-39 CP-1 is terminated and replaced by Docket No. D-2007-039 CP-2; and

c. The project and the appurtenant facilities described in the Section A “Physical Features” of this docket shall be added to the Comprehensive Plan.

II. The project and appurtenant facilities as described in the Section A “Physical Features” of this docket are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the PADEP in its NPDES permit, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission’s.

b. The facility and operational records shall be available at all times for inspection by the DRBC.

c. The facility shall be operated at all times to comply with the requirements of the *WQR* of the DRBC.

d. The docket holder shall comply with the requirements contained in the Effluent Tables in Section A.4.d. of this docket. The docket holder shall submit the required monitoring results directly to the DRBC Project Review Section. The monitoring results shall be submitted annually, absent any observed limit violations, by January 31. If a DRBC effluent limit is violated, the docket holder shall submit the result(s) to the DRBC within 30 days of the violation(s) and provide a written explanation that states the action(s) the docket holder has taken to correct the violation(s) and protect against any future violations.

e. Except as otherwise authorized by this docket, if the docket holder seeks relief from any limitation based upon a DRBC water quality standard or minimum treatment requirement, the docket holder shall apply for approval from the Executive Director or for a docket revision in accordance with Section 3.8 of the *Compact* and the *Rules of Practice and Procedure*.

f. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

g. The discharge of wastewater shall not increase the ambient temperatures of the receiving waters by more than 5°F until stream temperatures reach 50°F, nor by more than 2°F when stream temperatures are between 50°F and 58°F, nor shall such discharge result in stream temperatures exceeding 58°F. (Trout Waters only)

h. The docket holder is permitted to treat and discharge the categories of wastewaters defined in the “Area Served” section of this docket.

i. The docket holder shall make wastewater discharge in such a manner as to avoid injury or damage to fish or wildlife and shall avoid any injury to public or private property.

j. Nothing in this docket approval shall be construed as limiting the authority of DRBC to adopt and apply charges or other fees to this discharge or project.

k. The issuance of this docket approval shall not create any private or proprietary rights in the waters of the Basin, and the Commission reserves the right to amend, suspend or rescind the docket for cause, in order to ensure proper control, use and management of the water resources of the Basin.

l. Prior to constructing any substantial alterations or additions at the WFP, the docket holder shall submit and have approved by the Executive Director of the DRBC, a NPSPCP in accordance with Article 3.10.3A.2.e.1). and 2). of the Commission's *WQR*.

m. The docket holder's NPSPCP meets the general requirements of Article 3.10.3.A.2.e.1) of the Commission's *WQR*.

n. A complete application for the renewal of this docket, or a notice of intent to cease the operations (withdrawal, discharge, etc.) approved by this docket by the expiration date, must be submitted to the DRBC at least 12 months prior to the expiration date below (unless permission has been granted by the DRBC for submission at a later date), using the appropriate DRBC application form. In the event that a timely and complete application for renewal has been submitted and the DRBC is unable, through no fault of the docket holder, to reissue the docket before the expiration date below, the terms and conditions of this docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

o. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.

p. Any person who objects to a docket decision by the Commission may request a hearing in accordance with Article 6 of the Rules of Practice and Procedure. In accordance with Section 15.1(p) of the Delaware River Basin Compact, cases and controversies arising under the Compact are reviewable in the United States district courts.

q. The docket holder may request of the Executive Director in writing the substitution of specific conductance for TDS. The request should include information that supports the effluent specific correlation between TDS and specific conductance. Upon review, the Executive Director may modify the docket to allow the substitution of specific conductance for TDS monitoring.

BY THE COMMISSION

DATE APPROVED: March 7, 2012

EXPIRATION DATE: March 31, 2017